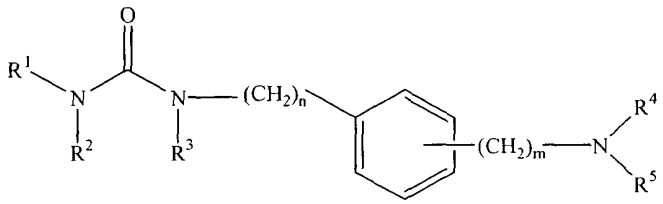
Amendments to the Claims

Please cancel claims 30 and 33-35 without prejudice. Please amend claims 29, 31 and 36, and add new claims 41-43 as indicated below.

Listing of Claims

1-28. (cancelled).

29. (currently amended) A compound according to formula I:



(I)

wherein

m and n are each and independently an integer from 1-3, and one or more of the hydrogens in the alkylene chain may optionally be substituted by any one of C_1-C_6 alkyl, C_1-C_6 alkoxy, or hydroxy; or one or more of the methylene groups may optionally be substituted by a heteroatom selected from O, N or S;

R^1 is selected from hydrogen, a branched or straight C_1-C_6 alkyl, C_2-C_6 alkenyl, C_3-C_8 cycloalkyl, C_4-C_8 (alkyl-cycloalkyl) wherein the alkyl is a C_1-C_2 alkyl and the cycloalkyl is a C_3-C_6 cycloalkyl;

R^2 is selected from any of:

(i) hydrogen;

(ii) a straight or branched C_1-C_6 alkyl, C_2-C_6 alkenyl or C_2-C_6 alkynyl;

(iii) -[$(CH_2)_q$-aryl], wherein the aryl has 6 or 10 carbon atoms and may optionally be substituted by 1 or 2 substituents Y, wherein each Y is as defined below; and wherein q is an integer from 0 to 3;

(iv) -[$(CH_2)_r$-heteroaryl] wherein the heteroaryl has from 5 to 10 atoms, each heteroatom being selected from any of S, N and O and wherein the heteroaryl may be substituted by 1 or 2 substituents Y, wherein each Y is as defined below; and wherein r is an integer from 0 to 3;

(v) C_3-C_{10} cycloalkyl, optionally comprising one or more unsaturations and optionally substituted by one or more heteroaryls, where each heteroaryl has from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; and wherein the ~~aryl and~~ heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;

(vi) C_6-C_{10} aryl, optionally and independently substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O and wherein the heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;

(vii) a heteroaryl having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; wherein the ~~aryl and~~ heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;

or R^1 and R^2 may optionally form a heterocyclic ring;

R^3 is selected from any one of:

~~(i) hydrogen;~~

(~~ii~~ i) a ~~straight or branched C_1-C_6 alkyl,~~ C_2-C_6 alkenyl or C_2-C_6 alkynyl;

(~~iii~~ ii) -[$(CH_2)_q$-aryl] wherein q is an integer from 0 to 3, and wherein the aryl has 6 or 10 carbon atoms and may optionally be substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; and wherein the aryl and heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;

(~~iv~~ iii) a heteroaryl-(C_5-C_{10}alkyl), wherein the heteroaryl has from 5 to 10 atoms, each heteroatom being selected from any of S, N and O, and wherein the ~~aryl and~~

heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;

(~~v~~ iv) a C_3-C_{10} cycloalkyl, optionally comprising one or more unsaturations and optionally substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O, and wherein the aryl and heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;

(~~vi~~ v) –[(C_3-C_6 cycloalkyl)-$(CH_2)_q$] wherein q is an integer from 1 to 3;

R^4 is selected from:

(i) hydrogen;

(ii) a straight or branched C_1-C_6 alkyl, C_2-C_6 alkenyl or C_2-C_6 alkynyl;

(iii) -[$(CH_2)_q$-aryl] wherein q is an integer from 0 to 3, and wherein the aryl has 6 or 10 carbon atoms and may optionally be substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; and wherein the aryl and heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;

(iv) heteroaryl-(C_5-C_{10} alkyl), wherein the heteroaryl has from 5 to 10 atoms, each heteroatom being selected from any of S, N and O, and wherein the ~~aryl and~~ heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;

(v) a C_3-C_{10} cycloalkyl, optionally comprising one or more unsaturations and optionally substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O;
and wherein the ~~aryl and~~ heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;

(vi) a C_6-C_{10} aryl, optionally and independently substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; and wherein the heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;

(vii) a heteroaryl having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; wherein the aryl and heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein Y is as defined below;

R^5 is selected from:

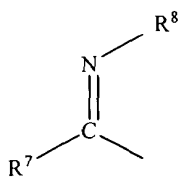
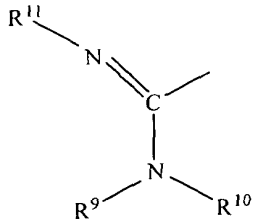
(i) hydrogen;

(ii) a straight or branched C_1-C_6 alkyl, C_2-C_6 alkenyl or C_2-C_6 alkynyl;

(iii) -[$(CH_2)_q$-aryl] wherein q is an integer from 0 to 3, and wherein the aryl has 6 or 10 carbon atoms and may optionally be substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; and wherein the aryl and heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;

(iv) a heteroaryl-(C_5-C_{10} alkyl), wherein the heteroaryl has from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; and wherein the ~~aryl and~~ heteroaryl may optionally and independently be substituted 1 or 2 substituents Y, wherein each Y is as defined below;

(v) a C_3-C_{10} cycloalkyl, optionally comprising one or more unsaturations and optionally substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O, and wherein the ~~aryl and~~ heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;

(vi)  or  ;

wherein R^7, R^8, R^9, R^{10} and R^{11} are each and independently selected from:

(a) hydrogen;

(b) a straight or branched C_1-C_6 alkyl, C_2-C_6 alkenyl or C_2-C_6 alkynyl;

(c) –[$(CH_2)_q$-aryl] wherein q is an integer from 0 to 3, and wherein the aryl has 6 or 10 carbon atoms and may optionally be substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of the S, N and O; and wherein the aryl and heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;

(d) a heteroaryl-(C_5-C_{10} alkyl), wherein the heteroaryl has from 5 to 10 atoms, each heteroatom being selected from any of S, N and O, and wherein the ~~aryl and~~ heteroaryl may optionally and independently be substituted 1 or 2 substituents Y, wherein each Y is as defined below;

(e) a C_3-C_{10} cycloalkyl, optionally comprising one or more unsaturations and optionally substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O;
and wherein the ~~aryl and~~ heteroaryl may optionally and independently be substituted 1 or 2 substituents Y, wherein each Y is as defined below;

(f) a C_6-C_{10} aryl, optionally and independently substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O, and wherein the heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;

or R^4 and R^5 may optionally form a heterocyclic ring optionally substituted by1 or 2 substituents Y, wherein each Y is as defined below;

Y is each and independently selected from any of: hydrogen, CH_3; -$(CH_2)_{p1}CF_3$; halogen; C_1-C_3 alkoxy; hydroxy; -NO_2; -OCF_3; -$CONR^aR^b$; -$COOR^a$; -COR^a; -$(CH_2)_{p2}NR^aR^b$; -$(CH_2)_{p3}CH_3$; $(CH_2)_{p4}SOR^aR^b$; -$(CH_2)_{p5}SO_2R^a$; -$(CH_2)_{p6}SO_2NR^a$; C_4-C_8(alkyl-cycloalkyl) wherein the alkyl is a C_1-C_2 alkyl, and the cycloalkyl is a C_3-C_6 cycloalkyl; 1 or 2 heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; and oxides selected from N-oxides or sulfoxides; and wherein:

R^a and R^b are each and independently selected from hydrogen, a branched or straight C_1-C_6 alkyl, a C_1-C_6 alkenyl, a C_3-C_8 cycloalkyl; and wherein:

p^1, p^2, p^3, p^4, p^5 and p^6 are each and independently 0, 1 or 2;

as well as pharmaceutically acceptable salts, isomers, hydrates, and isoforms thereof~~,~~

~~with the proviso that when R^1=R^3= R^4= R^5= H, then R^2 is not hydrogen or a straight or branched C_1-C_6 alkyl and when R^2=R^3= R^4= R^5= H then R^1 is not hydrogen or a straight or branched C_1-C_6 alkyl~~.

30. (cancelled).

31. (currently amended) A compound according to claim ~~30~~ 29, wherein m=n=1

R^1 is selected from

(i) a straight or branched C_1-C_6 alkyl; or

(ii) ~~a C_3-C_8 cycloalkyl~~ hydrogen;

R^2 is selected from

(i) methyl; or

(ii) phenyl, optionally substituted by 1 or 2 substituents Y wherein ~~[each]~~ Y is as defined below;

R^3 is selected from

(i) -CH_2-phenyl optionally substituted by 1 or 2 substituents Y where Y is as defined below;

(ii) –CH_2-cyclohexyl or –CH2-cyclopentyl;

R^4 is selected from

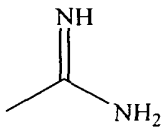
(i) hydrogen; or

(ii) methyl;

R^5 is selected from

(i) hydrogen;

(ii) methyl; or

(iii)  ;

or R^4 and R^5 together form a heterocyclic ring optionally substituted by 1 or 2 substituents Y where Y is as defined below;

Y is each and independently selected from any of: hydrogen, CH_3; $-(CH_2)_{p1}CF_3$; halogen; C_1-C_3 alkoxy; hydroxy; $-NO_2$; $-OCF_3$ $-CONR^aR^b$; $-COOR^a$; $-COR^a$; $-(CH_2)_{p2}NR^aR^b$; $-(CH_2)_{p3}CH_3$; ~~$(CH_2)_{p4}SOR^aR^b$~~; $-(CH_2)_{p5}SO_2R^a$; ~~$-(CH_2)_{p6}SO_2NR^a$~~; C_4-C_8(alkyl-cycloalkyl) wherein the alkyl is a C_1-C_2 alkyl, and the cycloalkyl is a C_3-C_6 cycloalkyl; 1 or 2 heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; and oxides selected from N-oxides or sulfoxides and wherein:

R^a and R^b are each and independently selected from hydrogen, a branched or straight C_1-C_6 alkyl, a C_1-C_6 alkenyl, a C_3-C_8 cycloalkyl; and wherein:

p^1, p^2, p^3, p^4, p^5 and p^6 are each and independently 0, 1 or 2, and pharmaceutically acceptable salts thereof.

33-35. (cancelled).

36. (currently amended) The compound according to claim ~~30~~ 29 wherein:

R^1 is hydrogen or a straight or branched ~~C^1-C^6~~ C_1-C_6 alkyl;

R^2 is selected from:

(i) a straight or branched C_1-C_6 alkyl;

(ii) a [$(CH_2)_q$-aryl], wherein the aryl has 6 or 10 carbon atoms and may optionally be substituted by 1 or 2 substituents Y, wherein each Y is as defined in claim 29; and wherein q is an integer from 0 to 3;

R^3 is a -[$(CH_2)_q$-aryl], wherein the aryl has 6 or 10 carbon atoms and may optionally be substituted by 1 or 2 substituents Y, wherein each Y is as defined in claim 29; and wherein q is an integer from 0 to 3;

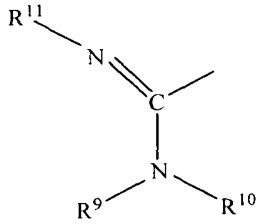
R^4 ~~and R^5 are~~ is hydrogen or a straight or branched C_1-C_6 alkyl;

R5 is selected from:

(i) hydrogen;

(ii) a straight or branched C_1-C_6 alkyl; or

(iii)



wherein R^9, R^{10}, and R^{11} are hydrogen or a straight or branched C_1-C_6 alkyl;

or R^4 and R^5 may form a heterocyclic ring optionally substituted by1 or 2 substituents Y, wherein each Y is as defined in claim 29;

as well as pharmaceutically acceptable salts thereof.

37. (previously presented) The compound of claim 36, wherein Y is each and independently selected from any of: hydrogen, CH_3; -$(CH_2)_{p1}CF_3$; halogen; C_1-C_3, alkoxy; hydroxy; -NO_2; -OCF_3; $CONR^aR^b$; -$COOR^a$; -COR^a; -$(CH_2)_{p2}NR^aR^b$; and -$(CH_2)_{p3}CH_3$; and wherein:

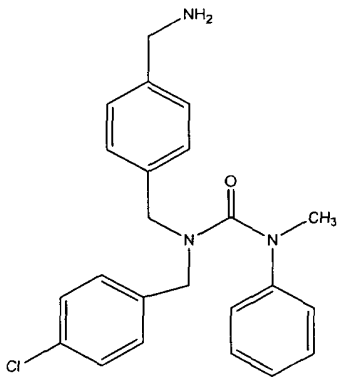
R^a and R^b are each and independently selected from hydrogen, a branched or straight C_1-C_6 alkyl, a C_1-C_6 alkenyl, a C_3-C_8 cycloalkyl; and wherein:

p^1, p^2 and p^3 are each and independently 0,1 or 2.

38. (previously presented) The compound of claim 37, wherein Y is each and independently selected from any of: hydrogen; CH_3; $-(CH_2)_{p1}CF_3$; halogen; C_1-C_3, alkoxy; hydroxy; $-NO_2$; $-OCF_3$; and wherein p^1 is 0, 1 or 2.

39. (previously presented) The compound of claim 38, wherein R^4 and R^5 are hydrogen.

40. (previously presented) A compound wherein said compound is:



41. (new) A compound according to any one of claims 29, 31, 32 or 36-40, wherein said compound is in the form of a hydrochloride, sulfate, tartrate or citrate salt.

42. (new) A compound according to any one of claims 29, 31, 32 or 36-40, wherein said compound is isotopically labeled.

43. (new) A pharmaceutical composition comprising a compound according to any one of claims 29, 31, 32 or 36-40 as an active ingredient, together with a pharmacologically and pharmaceutically acceptable carrier.